



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,100	10/20/2000	Hideaki Teshima	107494	9124
25944	7590	07/09/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			CHU, KIM KWOK	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 07/09/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/692,100

**Applicant(s)**

TESHIMA ET AL.

**Examiner**

Kim-Kwok CHU

**Art Unit**

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 22 is/are pending in the application.
- 4a) Of the above claim(s) 18-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 18-21 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1</u> . | 6) <input type="checkbox"/> Other: ____.  |

***Election/Restriction***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-17 and 22, drawn to a discontinuous means for detecting a discontinuous position in a recording medium, classified in class 369, subclass 47.15.

II. Claims 18-21, drawn to a computer program (file management) for scanning and detecting a discontinuous position between recording contents recorded on a recording medium, classified in class 386, subclass 126.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions Group I and Group II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable.

In the instant case, invention Group I, claims 1-17 and 22, claim a position discontinuous means for detecting an actual discontinuous position (target seeking) between recording contents. The actual discontinuous position is marked with a time code information by the scanner and is recognized by the scanner and the time code detecting means. In other words, detecting the time code information does not

require a file management program stored in the medium as required by Group II.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Mr. Robert A. Miller on June 21, 2004, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-17 and 22. Affirmation of this election must be made by Applicant in replying to this Office action. Claims 18-21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is advised that a reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

**Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

7. Claim 1-4, 6 and 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okubo (U.S. Patent 5,337,296) in view of Yanagi (U.S. Patent RE 36,590).

Okubo teaches an optical pickup very similar to that of the instant invention. For example, Okubo teaches the following:

(a) as in claim 1, a scanning unit 1 that scans the recording medium in a first direction and in a second direction that is different from the first direction (Figs. 3, 14 and 15; scanning unit 1 scans inward and outward for a target position);

(b) as in claim 1, a first detecting unit 3 that detects a temporary discontinuous position located in a vicinity of the actual discontinuous position while the scanning unit 1 scans the recording medium in the first direction (Fig. 3; Frame address detector 3 detects the

current pickup position which is a temporary discontinuous position located in a vicinity of the actual discontinuous position; a discontinuous position is the frame address/number and its time code);

(c) as in claim 1, a second detecting unit 23 that detects the actual discontinuous position while the scanning unit scans the recording medium in the second direction (Figs. 3 and 12; column 13, lines 24-30);

(d) as in claim 1, a scan controller 9 that controls the scanning unit to scan the recording medium at a scan speed except while the second detecting unit detects the actual discontinuous position, and to scan the recording medium at a scan speed while the second detecting unit detects the actual discontinuous position (Figs. 2 and 3; tracking/searching a target position requires coarse tracking and fine tracking);

(e) as in claim 1, the second scan speed being slower than the first scan speed (inherent feature where the fine tracking speed is slower than the coarse tracking speed);

(f) as in claim 2, the second direction is opposite to the first direction (Fig. 14);

(g) as in claim 3, the scan controller 9 controls the scanning unit to scan the recording medium at the second scan speed in the second direction within a predetermined detection area including therein the actual discontinuous

position and the temporary discontinuous position (Figs. 2, 3 and 14; fine tracking);

(h) as in claim 4, the recording medium records time information indicative of time of recording the recording contents (Fig. 14; time code is the time information);

(i) as in claim 6, a time information reader 1 that reads the time information (Fig. 3; pickup 1 reads time information);

(j) as in claim 6, the first detecting unit 3 and the second detecting unit 23 detect the temporary discontinuous position and the actual discontinuous position, respectively, if the time information changes by at least a predetermined time difference (Figs. 3 and 14; the time information changes can be considered as a new target position search such as locating the next frame of the target frame);

(k) as in claim 8, a time difference setting unit 21 that sets the predetermined time difference (Fig. 3; column 13, lines 24-30);

(l) as in claim 9, the first detecting unit detects a plurality of temporary discontinuous positions in a predetermined scan area (Fig. 14; repeatedly search several targets of different time code);

(m) as in claim 9, second detecting unit detects a

plurality of actual discontinuous positions, each of the plurality of temporary discontinuous positions corresponding to one of the plurality of actual discontinuous positions (Fig. 14; repeatedly search several targets of different time code);

(n) as in claim 9, scan controller controls the scanning unit to scan the recording medium in the first direction throughout the predetermined scan area while the first detecting unit detects the plurality of temporary discontinuous positions, and to scan the recording medium in the second direction throughout the predetermined scan area while the second detecting unit detects the plurality of actual discontinuous positions (Fig. 14; coarse tracking and fine tracking);

(o) as in claim 10, the scan controller controls the scanning unit 9 to keep scanning at the second scan speed, when any adjacent two temporary discontinuous positions are located in a vicinity of each other (Fig. 14, recorded files having temporary discontinuous positions encircle the recorded file having a target position);

(p) as in claim 11, the recording medium further records positional information indicative of a position on the recording medium, the discontinuous position detecting



device further comprising a positional information reader that reads the positional information (Fig. 14; frame number corresponds to track number);

(q) as in claim 12, the positional information reader has an positional information storage unit that stores the positional information corresponding to the temporary discontinuous position (Fig. 4; latch is the storage unit); and

(r) as in claim 13, the scan controller 9 has a detection area setting unit that sets the predetermined detection area based on the positional information corresponding to the temporary discontinuous position stored in the storage unit (Fig. 14).

However, Okubo does not teach the following:

(a) as in claim 1, the scan controller scan the recording medium at a first scan speed and to scan the recording medium at a second scan speed while the second detecting unit detects the actual discontinuous position.

Yanagi teaches the following:

(a) a scan controller 3 scans the recording medium at a first scan speed and to scan the recording medium at a second scan speed while the second detecting unit detects the actual discontinuous position (Figs. 5 and 9; column 8, lines 50-67, column 9, lines 1-20).

Seeking a target position requires a servo tracking control which move the scanner in an optimum speed. In this case, although Okubo does not disclose a servo tracking process, however, for the benefit of accessing the target position as fast as possible, it would have been obvious to one of ordinary skill in the art to apply Yanagi's tracking control to Okubo's scanner, because Yanagi's servo tracking control only slow down the scanner as a fine tracking movement when it reaches near its target position.

8. Method claims 14-17 are drawn to the method of using the corresponding apparatus claimed in claims 1, 8, 9 and 10. Therefore method claims 14-17 correspond to apparatus claims 1 and 8-10 and are rejected for the same reasons of anticipation as used above.

9. Claims 5, 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okubo (U.S. Patent 5,337,296) in view of Yanagi (U.S. Patent Re. 36,590) and Takahashi et al. (U.S. Patent 5,966,495).

Okubo in view of Yanagi teach a discontinuous position detecting device for detecting an actual discontinuous position between recording contents recorded on a recording medium very similar to that of the instant invention. For example, Okubo in view of Yanagi teach the following:

(a) as in claim 7, the time information reader 1 includes a time information storage unit 7a that stores the time information corresponding to the detected discontinuous position (Fig. 3; latch is a storage unit).

However, both Okubo and Yanagi do not teach the following:

(a) as in claim 5, the time information includes information on dates of recording the recording contents;

(b) as in claim 7, the time information reader includes a display that displays thereon the time information stored in the time information storage unit; and

(c) as in claim 22, the recording medium is tape-shaped.

Takahashi teaches the following:

(a) a time information includes information on dates of recording the recording contents (Fig. 13);

(b) the time information reader includes a display 20 that displays thereon the time information stored in the time information storage unit (Fig. 1; column 6, lines 8-10); and

(c) the recording medium is tape-shaped (Fig. 1; column 2, lines 60-62).

A time-code can be used as a date reference for marking a file recorded on a disk. Hence, to search a target file in Okubo's recording medium, it would have been obvious to include data information such as Takahashi's in the time-code, because the data information can be used as an index for locating a certain recorded file.

Furthermore, to set up a search of a target file with a time code, it would have been obvious to one of ordinary skill in the art to add a display means such as Takahashi's in Okubo's time-code search apparatus, because the display means can help a user to visualize the time information attached to a certain file under the search operation.

On the other hand, although Okubo's recording medium is a disk, for the benefit of recording speed, it would have been obvious to one of ordinary skill in the art to use a different type of recording medium such as Takahashi's tape, because the tape does not require a laser light source as a read/write means.

### **Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Matsumoto (6,526,218) is pertinent because Matsumoto teaches an apparatus integrated with an editing function and a data reproducing function.

Takano (6,256,453) is pertinent because Takano teaches a video camera having a display means and disk recording means.

Yamada et al. (6,115,537) is pertinent because Yamada teaches a recording of data packets with ID information.

Tozaki et al. (6,108,281) is pertinent because Tozaki teaches a accessing control having a rough search and a fine search operation.

Oyama (5,862,296) is pertinent because Oyama teaches an information signal reproducing apparatus having a time code with year and month information.

Hirano (5,774,435) is pertinent because Hirano teaches a recording of data packets having a time code.

Fujinami (5,668,916) is pertinent because Fujinami teaches an apparatus for reproducing data not successively located on a recording medium.

11. Any response to this action should be mailed to:  
Commissioner of Patents and Trademarks Washington, D.C.  
20231

or faxed to:  
(703) 872-9306, (for formal communications intended for  
entry)

Or:  
(703) 746-6909, (for informal or draft communications,  
please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal  
Park II, 2021 Crystal Drive, Arlington. VA., Sixth Floor  
(Receptionist).

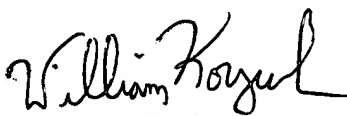
Any inquiry of a general nature or relating to the  
status of this application should be directed to the Group  
receptionist whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier  
communications from the examiner should be directed to Kim  
CHU whose telephone number is (703) 305-3032.

KC 6/23/04

Kim-kwok CHU  
Examiner AU2653  
June 23, 2004

(703) 305-3032

  
WILLIAM KORZUCH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600